

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

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> Martin Suuberg Commissioner

## AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

#### **ISSUED TO ["the Permittee"]:**

Pittsfield Generating Company LP 235 Merrill Road Pittsfield, MA 01201

#### **FACILITY LOCATION:**

Pittsfield Generating Company LP 235 Merrill Road Pittsfield, MA 01201

#### **NATURE OF BUSINESS:**

Electric Power and Steam Generation

#### **INFORMATION RELIED UPON:**

Application No. 1-O-10-038 Transmittal No. X234968

#### **FACILITY IDENTIFYING NUMBERS:**

AQ ID: 1170006 FMF FAC NO.: 50773 FMF RO NO.: 161191

Standard Industrial Classification (SIC): 4911 North American Industrial Classification System (NAICS): 221112

#### **RESPONSIBLE OFFICIAL:**

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#### **FACILITY CONTACT PERSON:**

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This Operating Permit shall expire on	<u>•</u>
For the Department of Environmental Protection	
Michael Gorski	Date
Regional Director	
Department of Environmental Protection	
Western Regional Office	

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#### SPECIAL CONDITIONS FOR OPERATING PERMIT

#### 1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

#### A. DESCRIPTION OF FACILITY AND OPERATIONS

The Pittsfield Generating Company LP is an electric power generation facility located at 235 Merrill Road in Pittsfield, Massachusetts. The facility largely consists of three General Electric Frame 6 6001B combustion turbines, known as Emission Unit 1, 2 and 3, which are each controlled by steam injection and a selective catalytic reduction system. Each combustion turbine has a maximum heat input rate of 430.25 million Btu per hour and is exhausted to an associated Zurn heat recovery steam generator. The steam generated in the three heat recovery steam generators is combined to supply a single GE steam turbine. Emission Units 1, 2, and 3 burn natural gas or #2 fuel oil and operate in combined-cycle mode with a net total output of 165-megawatts. The three combustion turbines were initially approved by MassDEP Plan Approval #B-87-C-007 on June 30, 1989. The facility commenced commercial operation in 1989.

The combustion turbines are subject to 40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). However, the combustion turbines are not subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (40 CFR Part 63, Subpart YYYY) since the facility is an area source of hazardous air pollutant (HAP) emissions. As an area source, the facility-wide total and individual HAP potential to emit are less than the major source thresholds of 25 tons per year and 10 tons per year, respectively. The combustion turbines are not subject to the Title IV Acid Rain Program of the 1990 Clean Air Act Amendments because 40 CFR 72.6(b)(1) states that simple combustion turbines that commenced commercial operation before November 15, 1990 are exempt from the requirements of the program. The term simple combustion turbines, as defined in 40 CFR 72.2, include combined cycle units which do not have auxiliary firing (duct burners). The combined cycle combustion turbines at the facility do not have auxiliary firing and are therefore not subject to the Acid Rain Program.

The facility has three-Detroit Diesel Model: 71237300, # 2 fuel oil-fired stationary reciprocating internal combustion engines (RICE) known as Emission Unit 4, 5 and 6. Each Detroit Diesel RICE is a black start engine, as defined under 40 CFR 63.6675, rated at a maximum of 4.278 million Btu per hour of heat input. The purpose of a black start engine is to provide the cranking

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torque and speed required for start up of a combustion turbine. The RICEs were constructed at the facility during July 1990.

The facility has one Kohler Model# 7RMY62, natural gas-fired emergency stationary RICE with a maximum rating of 0.12 million Btu per hour of heat input and one Caterpillar Model# 3208,#2 fuel oil-fired emergency stationary RICE fire pump with a maximum rating of 1.46 million Btu per hour of heat input. Both engines were constructed at the facility on July 2, 1990. The emergency Kohler Model# 7RMY62 RICE and the Caterpillar Model# 3208 RICE have been included in the operating permit as Emission Unit #24 and #25.

The five stationary RICEs, described above, are also subject to the federal National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subpart ZZZZ since they are located at an area source for HAPs. The five stationary RICEs are defined by the subpart as existing stationary engines since they were constructed at the site prior to June 12, 2006. The compliance dates for the compression and spark ignition RICEs were May 3, 2013 and October 19, 2013 respectively. The applicable requirements from Subpart ZZZZ have been included in this operating permit.

The facility also has an 8.4 MMBtu/hr, natural gas/#2 fuel oil-fired Hurst Boiler and Welding Co. Model#S1250.200.8 auxiliary boiler which was installed in June 7, 2005, to meet the heating needs of the facility. This boiler is exempt from the plan approval requirements of 310 CMR 7.02 pursuant to 310 CMR 7.02 (2)(b)15. In addition, the auxiliary boiler is not subject to the federal National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources since it meets the definition of a gas-fired boiler pursuant to 40 CFR 63.11195(e). As defined in 40 CFR 63.11237,a gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The auxiliary boiler has applicable regulatory requirements so it has been included into the operating permit as Emission Unit #30.

The facility is considered to be a major source since it has the potential to emit greater than 100 tons per year of sulfur dioxide, 50 tons per year of nitrogen oxides (NOx), 50 tons per year of volatile organic compounds and 100 tons per year of carbon monoxide. Therefore the facility is subject to the Operating Permit and Compliance Program pursuant to 310 CMR 7.00: Appendix C(2).

The facility is a "major stationary source" pursuant to the Emission Offsets and Nonattainment Review regulations of 310 CMR 7.00: Appendix A because the facility has the potential to emit more than 50 tons per year of NOx and more than 50 tons per year of VOCs.

The facility is a "major stationary source" pursuant to the Prevention of Significant Deterioration regulations of 40 CFR § 52.21 since it has the potential to emit more than 100 tons per year of a new source review regulated pollutant.

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As part of this operating permit renewal application review, a compliance assurance monitoring (CAM) applicability determination was conducted. The determination concluded that the combustion turbines are exempt from complying with the CAM requirements of 40 CFR Part 64 since the emission limitations for which there is a control device are required to have a continuous compliance determination method, as defined in 40 CFR 64.1. This exemption is specified in 40 CFR 64.2(b)(1)(vi).

The owner/operator of the facility is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32 and has submitted a CAIR emission control application pursuant to 310 CMR 7.32(3). 310 CMR 7.28 has been superseded by 310 CMR 7.32. The applicable requirements of this regulation have been included in this operating permit.

The owner/operator of facility is subject to the "Massachusetts CO<sub>2</sub> Budget Trading Program" stated at Regulation 310 CMR 7.70. This is a "cap-and-trade" system addressing carbon dioxide emissions that took effect in January 2009. The applicable requirements of this regulation have been included in this operating permit.

Massachusetts promulgated the 310 CMR 7.71: Reporting of Greenhouse Gas Emissions regulations on June 26, 2009. Pursuant to 310 CMR 7.71(3)(a)1., the owner/operator of facility is subject to the applicable requirements of this regulation which have been included in this operating permit.

The 500,000 gallon aboveground distillate oil storage tank has been removed from the operating permit as emission unit #15 since there are no applicable requirements. A recordkeeping condition was previously required pursuant to 40 CFR Subpart Kb. However, this condition is not applicable since Subpart Kb has been amended to state that it does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) pursuant to 40 CFR 60.110b(b).

### 2. <u>EMISSION UNIT IDENTIFICATION</u>

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

	Table 1					
<b>Emission Unit</b>	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)			
1(1)	Natural Gas and #2 Fuel Oil-Fired General Electric 6001B Combustion Turbine A	430.25 MMBtu/hr <sup>(2)</sup>	Steam Injection and SCR			
2 <sup>(1)</sup>	Natural Gas and #2 Fuel Oil-Fired General Electric 6001B Combustion Turbine B	430.25 MMBtu/hr <sup>(2)</sup>	Steam Injection and SCR			
3 <sup>(1)</sup>	Natural Gas and #2 Fuel Oil-Fired General Electric 6001B Combustion Turbine C	430.25 MMBtu/hr <sup>(2)</sup>	Steam Injection and SCR			
4	#2 Fuel Oil-Fired Detroit Diesel Model: 71237300, Engine A	4.278 MMBtu/hr	None			
5	#2 Fuel Oil-Fired Detroit Diesel Model: 71237300, Engine B	4.278 MMBtu/hr	None			
6	#2 Fuel Oil-Fired Detroit Diesel Model: 71237300 Engine C	4.278 MMBtu/hr	None			
7	Mechanical Draft Cooling Tower (4 cells)	n/a	drift eliminator			
24	Natural Gas-Fired, Kohler Model: 7RMY62, Emergency Engine	0.12 MMBtu/hr	None			
25	#2 Fuel Oil-Fired, Caterpillar Model#3208 Emergency Fire Pump	1.46 MMBtu/hr	None			
30	Natural Gas and #2 Fuel Oil-Fired Hurst Boiler and Welding Co. Model# S1250.200.8 Auxiliary Boiler	8.4 MMBtu/hr	None			

MMBtu/hr = Million British thermal units per hour

SCR = Selective Catalytic Reduction

EU = Emission Unit

PCD = Pollution Control Device

#### Table 1 Footnote:

(1) EU 1, EU 2, and EU 3 vent to three separate stacks, each 208 feet tall and 144 inches in diameter

(2) Based on ISO conditions at 59°F, 60% RH, and 14.7 psia atmospheric pressure.

### 3. <u>IDENTIFICATION OF EXEMPT ACTIVITIES</u>

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table	2
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

### 4. <u>APPLICABLE REQUIREMENTS</u>

#### A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

			Table	3a	
EU	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards <sup>(1)(2)(3)</sup>	Applicable Regulation and/or Approval No
1 2	Natural Gas & #2 Fuel Oil	$SO_2$	None	Gas $\leq$ 6.7 lb/hr Oil/mixed fuel $\leq$ 98.0 lb/hr Oil $\leq$ 0.203 lb/MMBtu <sup>(6)</sup>	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
3		PM <sup>(4)</sup>	None	Gas $\leq 2.5$ lb/hr Oil/mixed fuel $\leq 37$ lb/hr	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
		NOx	None	Gas/mixed fuel $\leq$ 16.2 lb/hr Oil $\leq$ 22.8 lb/hr Gas $\leq$ 244 lb/start up Oil $\leq$ 342 lb/start up $\leq$ 6.66 tons per calendar month	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
			As of the allowance deadline for a control period, the owners and operators of each CAIR NO <sub>x</sub> Ozone Season source and each CAIR NO <sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO <sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under 310 CMR 7.32(6)(e)1. in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO <sub>x</sub> Ozone Season units at the source, as determined in accordance with 310 CMR 7.32(8).	None	Regulation 310 CMR 7.32

				Table 3b	
EU	Fuel/Raw Material	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards(1)(2)(3)	Applicable Regulation and/or Approval No
1	Natural Gas &	СО	None	Any fuel ≤ 10.0 lb/hr	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
3	#2 Fuel Oil	VOC		Gas/mixed fuel ≤ 6.0 lb/hr Oil ≤ 5.7 lb/hr	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
		NH <sub>3</sub> (MA State only)		Gas/mixed fuel ≤ 14.0 lb/hr Oil ≤ 20.0 lb/hr	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
		Visible <sup>(5)</sup>		≤ 10% <sup>(5)</sup>	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
	Natural Gas	Sulfur in fuel		Gas ≤ 0.8% sulfur by weight	40 CFR Part 60–Subpart GG
	#2 Fuel Oil	Sulfur in Fuel		Oil ≤ 0.2% sulfur by weight <sup>(6)</sup>	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
				≤0.05% by weight – July 1, 2014 through June 30, 2018 ≤0.0015% by weight – On and after July 1, 2018	Regulation 310 CMR 7.05(1)(a)1.
	All	CO2		Hold CO <sub>2</sub> allowances available for compliance (notes 11 and 12)	Final Transmittal No X007169 310 CMR 7.70(1)(e)3.a. (State only)
				CO <sub>2</sub> allowance transfers	Final Transmittal No. X007169 310 CMR 7.70(7) (State only)

			Ta	able 3c	
EU	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
4 5 6	#2 Fuel Oil	NOx	If operation is ≤1000 hours per year for each engine (rolling 12 month total) and the ignition timing is retarded 4° from manufacturer's specifications; provided that the ignition timing shall not be retarded beyond the point that: any increase in CO emissions is >100 ppmvd, corrected to 15% O <sub>2</sub> , or the turbocharger speed is increased beyond the maximum operating speed recommended by the manufacturer, or the exhaust port temperature increases beyond the manufacturer's recommended operating temperature.		DEP Approval 1-B-94-032 (9/15/94) Regulation 310 CMR 7.19(8)(d)
			If operation is for >1000 hours per year (rolling 12 month total) and if timing is not retarded relative to manufacturer's specifications.	9.0 g/bhp-hr <sup>(8)</sup>	DEP Approval 1-B-94-032 (9/15/94) Regulation 310 CMR 7.19(8)(c)3
		Smoke		< No. 1 of Chart <sup>(13)</sup> , except No. 1 to < No. 2 of Chart for ≤ 6 minutes during any one hour	Regulation 310 CMR 7.06(1)(a)
		Opacity		< 20%, except 20 to < 40% for ≤ 2 minutes during any one hour	Regulation 310 CMR 7.06(1)(b)
		Sulfur in fuel		Oil ≤ 0.2% S by weight	DEP Approval #1-P-95-011 (6/8/95 & 11/27/95)
				≤0.05% by weight – July 1, 2014 through June 30, 2018 ≤0.0015% by weight – On and after July 1, 2018	Regulation 310 CMR 7.05(1)(a)1.
			See Section 5. Special Terms and	, č	40 CFR Part 63, Subpart ZZZZ

				Table 3d	
EU	Fuel/Raw Material/	Pollutant	Operational and/or Production Limits	Emissions Limits/Standards	Applicable Regulation and/or Approval No
24	Natural Gas (EU 24)		See Section 5. Spe	cial Terms and Conditions, Table 8.	40 CFR Part 63, Subpart ZZZZ
25	#2 Fuel Oil (EU 25)	Smoke	None	< No. 1 of Chart <sup>(13)</sup> , except No. 1 to < No. 2 of Chart for $\leq$ 6 minutes during any one hour	Regulation 310 CMR 7.06(1)(a)
		Opacity		$\leq$ 20%, except 20 to $\leq$ 40% for $\leq$ 2 minutes during any one hour	Regulation 310 CMR 7.06(1)(b)
25	#2 Fuel Oil	Sulfur in #2 fuel oil	None	≤0.05% sulfur by weight – July 1, 2014 through June 30, 2018  ≤0.0015% sulfur by weight – On and after July 1, 2018	310 CMR 7.05(1)(a)1. Table 1
30	Natural Gas	Particulate Matter	None	≤0.10 lb/MMBtu	310 CMR 7.02(8)(h)
	#2 Fuel Oil	Smoke	None	< No. 1 of Chart <sup>(13)</sup> , except No. 1 to < No. 2 of Chart for $\leq 6$ minutes during any one hour	Regulation 310 CMR 7.06(1)(a)
		Opacity	None	$\leq$ 20%, except 20 to $\leq$ 40% for $\leq$ 2 minutes during any one hour	Regulation 310 CMR 7.06(1)(b)
		Sulfur in #2 fuel oil	None	≤0.05% sulfur by weight – July 1, 2014 through June 30, 2018  ≤0.0015% sulfur by weight – On and after July 1, 2018	310 CMR 7.05(1)(a)1. Table 1
1		$SO_2$		$\leq$ 0.0015% surrur by weight – On and after July 1, 2018 $\leq$ 249.0 tpy <sup>(9)</sup>	DEP Approval #1-P-95-011 (6/8/95 &
2		PM <sup>(7)</sup>		≤94.0 tpy <sup>(9)</sup>	11/27/95)
3		NO <sub>x</sub>		≤243.0 tpy <sup>(9)</sup>	
5		CO		≤131.0 tpy <sup>(9)</sup>	
6		VOC		≤78.3 tpy <sup>(9)</sup>	
		NH <sub>3</sub> (MA State only)		≤194.6 tpy <sup>(9)</sup>	
Facility- wide	All	Greenhouse gas <sup>10</sup>	N/A	N/A	310 CMR 7.71 (state only)
wide		Total HAPs	None	< 25.0 tons in any 12 consecutive month period	Operating Permit #1-O-10-038
		Individual HAPs	None	<10.0 tons in any 12 consecutive month period	

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#### Table 3 Key:

CO = Carbon Monoxide

 $NO_x = Nitrogen Oxides$ 

NH3 = Ammonia

Opacity = exclusive of uncombined water vapor?

PM = Total Particulate Matter

 $PM_{10}$  = Particulate Matter less than or equal to 10 microns in diameter

 $PM_{2.5}$  = Particulate Matter less than or equal to 2.5 microns in diameter

 $SO_2 = Sulfur Dioxide$ 

VOC = Volatile Organic Compounds

g/bhp-hr =grams per brake horsepower for one hour (engine output)

lbs/MMBtu = pounds per Million British thermal units

lbs/hr = pounds per hour

ppmvd @ 3% O2 = parts per million by volume, corrected to 3 percent oxygen

 $\leq$  = less than or equal to

% = percent

#### Table 3 Foot Notes:

- (1) Turbine emission limits at design conditions of 48°F average ambient temperature. The actual lb/hr turbine emission limit for each hour is calculated based on the current ambient temperature.
- (2) The "lb/hr", "tons/calendar month", and "lb/startup" emission limits are "per turbine".
- (3) All the "lb/hr" emission limits are based on a one-hour average, and are applicable under "normal operating conditions" at greater than 25 megawatts, which excludes periods of startup, shutdown, malfunction, equipment cleaning (such as on-line compressor cleaning), and/or emergency conditions.
- (4) Particulate matter as measured according to the applicable procedures specified in 40 CFR Part 60-Appendix A, Method 5.
- (5) Six-minute average
- (6) Based on 19,663 Btu/lb oil (higher heating value; "HHV"). If the HHV value of the oil is less than 19,663 Btu/lb, the allowable sulfur content will be reduced by the ratio of the actual oil HHV value to 19,663 such that the emission factor for SO<sub>2</sub> will not exceed 0.203 lbs/10<sup>6</sup> Btu.
- (7) Particulate matter as measured according to the applicable procedures specified in 40 CFR Part 60-Appendix A, Method 5.
- (8) One-hour average
- (9) To calculate the amount of a consecutive 12 month rolling period take the current calendar month amount and add it to the previous 11 calendar months total amount
- (10) <u>Greenhouse Gas</u> means any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs)
- (11) Compliance with CO<sub>2</sub> allowances shall be based on the control period. The control period is a three-calendar-year time period, unless extended to four years upon occurrence of a stage two trigger event. Control period and stage two trigger event are defined at 310 CMR 7.70(1)(b).
- (12) Hold CO<sub>2</sub> allowances available for compliance deductions under 310 CMR 7.70(6)(e), as of the CO<sub>2</sub> allowance transfer deadline, in the source's compliance account in an amount not less than the total CO<sub>2</sub> emissions for the control period from all CO<sub>2</sub> budget units at the source, as determined in accordance with 310 CMR 7.70(6) and (8).
- (13) Chart means the Ringelmann Scale for grading the density of smoke, as published by the United States Bureau of Mines and as referred to in the Bureau of Mines Information Circular No. 8333, or any smoke inspection guide approved by MassDEP.

### B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

		Table 4a
EU		Monitoring And Testing Requirements
1 2	1.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), calibrate, test, and operate continuous flue gas monitors and recorders (ie; CEMs) to measure and record emissions for NOx, CO, NH <sub>3</sub> .
3	2.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), calibrate, test, and operate continuous flue gas monitors and recorders (ie; COMs) to measure and record emissions for stack opacity.
	3.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and Regulation 310 CMR 7.00 Appendix C(9)(b)3., ensure that the flue gas COMS operates at all times the emission unit is operating, except for periods of COMs QA/QC activities, maintenance and repair. Except for periods of QA/QC activities, maintenance and repair, in all cases obtain valid data for at least 90% of the hours per calendar quarter during which the emission unit is operating.
	4.	In accordance with 310 CMR 7.00 Appendix C(9)(b)3., operate and maintain the COMs in accordance with the performance specifications contained in 40 CFR 60 Appendix B and quality assurance and quality control provisions contained in 40 CFR Appendix F.
	5.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), operate a continuous monitoring system to monitor and record fuel consumption and the ratio of steam-to-fuel being fired in each combustion turbine.
	6.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and Regulation 310 CMR 7.00 Appendix C(9)(b)3., ensure that the flue gas CEM equipment operates at all times the emission unit is operating, except for periods of CEMs QA/QC activities, maintenance and repair. Except for periods of QA/QC activities, maintenance and repair, in all cases obtain valid data for at least 90% of the hours per calendar quarter during which the emission unit is operating.
	7.	In accordance with 310 CMR 7.19(13)(b)10. and 310 CMR 7.00 Appendix C(9)(b)3., operate each CEM system at all times that the emissions unit is operating except for periods of CEM calibrations checks, zero span adjustment, and preventative maintenance as described in the preliminary monitoring plan submitted to the Department and as determined during certification. Notwithstanding such exceptions, in all cases obtain valid data for at least 75% of the hours per day, 75% of the days per month, and 90% of the hours per quarter during which the emission unit is operation.
	8.	In accordance with 310 CMR 7.19(13)(b)11. and 310 CMR 7.00 Appendix C(9)(b)3., use only valid data to calculate the emissions rate averages using conversion factors from 40 CFR 60 or approved by the MassDEP and USEPA.
	9.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), maintain an adequate supply of spare parts for the flue gas CEMs in support of achieving a minimum 90% on-line availability and data capture.
	10.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), equip the flue gas CEMs with audible and visible alarms to activate when emissions exceed the NOx, CO, NH <sub>3</sub> and opacity limits established in Table 3a/3b of this Operating Permit.
	11.	In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), 310 CMR 7.00 Appendix C(9)(c)., and 40 CFR 60.334, ensure that the NOx CEMs complies with MassDEP approved performance and location specifications, and is installed, certified and continues to operate in accordance with the equipment specifications and quality assurance procedures of 40 CFR 60.13, 40 CFR Part 60 Subpart GG and 40 CFR 75 Subpart H.

	Table 4b
EU	Monitoring And Testing Requirements
1 2 3	12. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and 310 CMR 7.00 Appendix C(9)(c), ensure that the CO and NH <sub>3</sub> CEMs comply with the MassDEP approved performance and location specifications. Equipment specifications, calibration, operating procedures, and quality assurance procedures must conform with the applicable EPA monitoring specifications at 40 CFR 60.13, 40 CFR 60 Appendix B, and 40 CFR 60 Appendix F, except that the frequency of Relative Accuracy Test Audits (RATA) and Cylinder Gas Audits (CGA), as applicable, will be in accordance with the quality assurance provisions for NOx CEMs contained in 40 CFR Part 75 Appendix B Section 2.2 for CGAs and Section 2.3 for RATAs.
	13. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), operate continuous monitors and alarm systems to monitor temperature at the inlets to the control system catalysts, except for periods of QA/QC activities, maintenance and repair.
	14. In accordance with 310 CMR 7.00 Appendix C(9)(b), monitor the duration of startups and the unit megawatt output at which the SCR is put into service.
	15. In accordance with 310 CMR 7.00 Appendix C(9)(b), ensure that Cylinder Gas Audits and Relative Accuracy Test Audits performed on the flue gas CEMs are conducted in accordance with methods established at 40 CFR 60.13 and 40 CFR 60 Appendix B, Performance Specification 2.
	16. In accordance with 310 CMR 7.32, monitor and test as required by the Massachusetts Clean Air Interstate Rule (CAIR).
	17. In accordance with 40 CFR Part 60 Subpart GG, monitor the sulfur content, density and gross calorific value (GCV) of the fuel oil in accordance with 40 CFR 60 Subpart GG Section 60.334 and 40 CFR Part 75 Appendix D Section 2.2.
	18. In accordance with 40 CFR Part 60 Subpart GG, monitor the sulfur content and GCV of natural gas in accordance with 40 CFR 60 Subpart GG Section 60.334 and 40 CFR Part 75 Appendix D Section 2.3.
	19. In accordance with 310 CMR 7.70(8)(a)1.a. and Transmittal #X007169, install all monitoring systems necessary to monitor CO <sub>2</sub> mass emissions in accordance with 40 CFR Part 75, except equation G-1in Appendix G shall not be used to determine CO <sub>2</sub> emissions under 310 CMR 7.70(8). (State only Requirement)
	20. In accordance with 310 CMR 7.70(8)(a)1.b and Transmittal #X007169, successfully complete all certification tests required under 310 CMR 7.70(8)(b) and meet all other requirements of 310 CMR 7.70(8) and 40 CFR Part 75 applicable to the monitoring systems under 310 CMR 7.70(8)(a)1.a. (State only Requirement)
	21. In accordance with 310 CMR 7.70(8)(a)1.c and Transmittal #X007169, record, report and quality-assure the data from the monitoring systems under 310 CMR 7.70(8)(a)1.a. (State only Requirement)

	Table 4c
EU	Monitoring And Testing Requirements
1	22. In accordance with 310 CMR 7.70(8)(a)2.a. and Transmittal #X007169, each CO <sub>2</sub> budget unit that
2	commenced commercial operation before July 1, 2008, must be in compliance with the requirements of 310 CMR 7.70(8) by January 1, 2009. (State only Requirement)
3	23. In accordance with 310 CMR 7.70(8)(a)3.a. and Transmittal #X007169, for each CO <sub>2</sub> budget unit that does not meet the applicable compliance date set forth in 310 CMR 7.70(8)(a)2.a., 2.b., and 2.c. for any monitoring system under 310 CMR 7.70(8)(a)1.a., determine, record, and report parameters required to determine CO <sub>2</sub> mass emissions in accordance with 40 CFR 75.31(b)(2) or (c)(3), or section 2.4 of Appendix D of 40 CFR Part 75, for each such monitoring system, as applicable. (State only Requirement)
	24. In accordance with 310 CMR 7.70(8)(b)4.b.(i) and Transmittal #X007169, whenever there is a replacement, modification, or change in a certified continuous emissions monitoring system under 310 CMR 7.70(8)(a)1.a. the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). (State only Requirement)
	25. In accordance with 310 CMR 7.70(8)(b)4.c. and Transmittal #X007169, the provisions of 310 CMR 7.70(8)(b)4.c. i through iv. apply to both initial certification and recertification of a monitoring system under 310 CMR 7.70(8)(a)1.a. (State only Requirement)
	26. In accordance with 310 CMR 7.70(8)(c)1. and Transmittal #X007169, whenever any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D or appendix D of 40 CFR Part 75. (State only Requirement)
	27. In accordance with 310 CMR 7.70(8)(h)1. and Transmittal #X007169, submit to the Department or its agent net electrical output. (State only Requirement)
	28. In accordance with 310 CMR 7.70(8)(h)4.a. and Transmittal #X007169, the billing meter shall record the electric output. (State only Requirement)
4	29. In accordance with 310 CMR 7.70(8)(h)5.c. and Transmittal #X007169, when a component of output measurement equipment fails to pass an accuracy test, all data shall be replaced by either zero or an output value that is approved as part of the monitoring plan required under 310 CMR 7.70(8)(h)3.until the component passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test. (State only Requirement)
4	30. In accordance with the DEP NOx RACT Approval #1-B-94-032 (9/15/94) and Regulation 310 CMR
5	7.19(8)(d)2., install and maintain an elapsed time meter for each engine to indicate, in cumulative hours, the elapsed engine operating time for the previous 12 months.
6	31. In accordance with Regulation 310 CMR 7.19(13)(a)9., if any engine is operated for 1000 hours or more during any consecutive 12 month period, demonstrate compliance with the emission limitation of 9.0 grams NOx/Bhp-hr by performing an initial stack test conducted in accordance with Regulation 310 CMR 7.19(13)(c). In accordance with Regulation 310 CMR 7.19(13)(c)4., the stack test shall be completed within 90 days.

	Table 4d
EU	Monitoring And Testing Requirements
4 5	32. In accordance with 40 CFR 63.6625(e)(3), the Permittee must operate and maintain EU 4, 5, 6, 24 and 25 and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or
6	develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
24 25	33. In accordance with 40 CFR 63.6625(h), the Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
24 25	34. In accordance with 40 CFR 63.6625(f), EU 24 and 25 shall be equipped with a non-resettable hour meter.
4 5 6 25	35. In accordance with 40 CFR 63.6625(i), the Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
24	36. In accordance with 40 CFR 63.6625(j), the Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Table 4e	
EU	Monitoring And Testing Requirements
30	37. In accordance with 310 CMR 7.04(4)(a), inspect and maintain each unit with an individual heat input capacity of greater than or equal to 3 MMBtu/hr in accordance with the manufacturer's recommendations and tested for efficient operation once each calendar year.
1 2 3 4 5 6 25 30	38. In accordance with 310 CMR 7.05(1)(a)2. And 7.00 Appendix C(9)(b), monitor the sulfur content of each new shipment of #2 fuel oil received. Compliance with % sulfur-in-fuel requirements can be demonstrated through testing (testing certification) or by maintaining a shipping receipt from the fuel supplier (shipping receipt certification).  The testing certification or shipping receipt certification of % sulfur-in-fuel shall document that sulfur testing has been done in accordance with the applicable ASTM test methods (D129-95, D1266-91, D1552-95, D2622-92, and D4294-90 for sulfur), or any other method approved by MassDEP and EPA.
Facility-wide	<ul> <li>39. In accordance with 310 CMR 7.71(1) and Appendix C(9) establish and maintain data systems or record keeping practices (e.g. fuel use records, SF6 usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N, the Climate Protection and Green Economy Act, St. 2008, c. 298, § 6. (State only requirement)</li> <li>40. In accordance with 310 CMR 7.13 Stack Testing, conduct stack testing, upon written request of the MassDEP, for any air contaminant for which the MassDEP has determined testing is necessary, to ascertain compliance with the MassDEP's regulations or design approval provisos. All such testing shall be conducted in accordance with 310 CMR 7.13 (1) and (2), and in accordance with the applicable procedures specified in 40 CFR 60 Appendix A or other method if approved by the MassDEP and EPA.</li> <li>Any emission testing to demonstrate compliance with the allowable particulate emission rate shall be in accordance with the EPA Methods 1 – 5, as specified in 40 CFR Part 60-Appendix A. In accordance with 310 CMR 7.00 Appendix C(9)(b), any emission testing to demonstrate compliance with the allowable emission limits shall be in accordance with EPA Method 7E for NOx, EPA Method 10 for CO, and EPA Method 9 for smoke/opacity, as specified in 40 CFR 60, Appendix A.</li> <li>41. Monitor operations such that information may be compiled for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12.</li> </ul>

#### Table 4 Key:

EU = Emission Unit Number

CEM = continuous emission monitor

CO = Carbon Monoxide

 $CO_2$  = Carbon Dioxide

COM = continuous opacity monitor

MMBtu/hr = million British thermal unit of heat input

per hour

 $NO_x = Nitrogen Oxides$ 

PM = Total Particulate Matter

% = percent

	Table 5a	
EU	Recordkeeping Requirements	
1 2 3	1. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and 310 CMR 7.00 Appen C(10)(b), retain for five years permanent records of the output of all CEMs for flue gas emissio consumption, steam-to-fuel ratios, SCR catalyst inlet temperature, and all operating and monito and make this data available to the MassDEP for inspection upon request. Records may be store facility's off-site archive storage vault.	on, fuel oring logs,
	2. In accordance with 310 CMR 7.19(13(d)1., the Permittee shall maintain a record of all measure performance evaluations, calibration checks, and maintenance or adjustments for each continuo monitor.	
	3. In accordance with 310 CMR 7.19(13)(d)3., the Permittee shall measure and record for each urbasis: type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel for each day, the actual emission rate, and the allowable emission rate.	
	4. In accordance with Regulation 310 CMR 7.19(13)(d)7., the Permittee shall maintain copies of a certifications or fuel oil analyses on site for a period of five years.	all fuel
	5. In accordance with 310 CMR 7.19(13)(d)8., the Permittee shall maintain all records required by 7.19(13)(d) for a period of five years in a permanently bound log book or any other form accept Department including computer retained and generated data.	
	6. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), keep records of each periodistillate oil is fired in the combustion turbines. The records must indicate the date, duration of amount of fuel fired, and the name of the operator making the entry.	
	7. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and 310 CMR 7.00 Appen C(10)(b), keep records for each delivery of aqueous ammonia solution the percent ammonia.	ıdix
	8. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), keep records of all proble or failures associated with the emission control system. Emergency releases from the ammonia system must be recorded in accordance with established facility procedures.	
	9. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), record occurrence and durstartup, shutdown, or malfunction in the operation of the facility, malfunction of air pollution coequipment, or periods during which the CEMs is inoperative.	
	10. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), calculate and keep record availability quarterly.	s of CEM
	11. In accordance with and 310 CMR 7.00 Appendix C(10)(b), record the duration of each startup a resultant amount of NOx emissions.	and the
	12. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), keep records, for a minim years, of all determinations of sulfur content of natural gas.	um of five
	13. In accordance with 40 CFR 60, 40 CFR 72 and 40 CFR 75, comply with all applicable records requirements contained therein.	eeping
	14. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), maintain records of all fur sampling in accordance with 40 CFR Part 60 Subpart GG and 40 CFR Part 75 Appendix D.	el oil
	15. In accordance with 310 CMR 7.32, maintain records as required by the Massachusetts Clean Al Rule (CAIR).	
	16. In accordance with 310 CMR 7.70(8)(e)1. and Transmittal #X007169, comply with all records reporting requirements in 310 CMR 7.70(8)(e), with all applicable record keeping and reporting under 40 CFR 75.73, and with the requirements of 310 CMR 7.70(2)(a)5. (State only Requirements of 310 CMR 7.70(2)(a)5.	g requirements nent)
	17. In accordance with 310 CMR 7.70(8)(h)6.a. and Transmittal #X007169, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 7.70(1)(e)5. and (2)(a)5. (State only Requirement)	

Table 5b	
EU	Recordkeeping Requirements
1 2 3	18. In accordance with 310 CMR 7.70(8)(h)6.b. and Transmittal #X007169, retain data used to monitor, determine, or calculate net generation for ten years from the date reported. (State only Requirement)
5	19. In accordance with DEP Approval #1-B-94-032 (9/15/94), keep records, updated monthly, of the hours of operation for each engine for all previous 12-month periods.
6	<ol> <li>In accordance with DEP Approval 1-B-94-032 (9/15/94), maintain records to certify that the ignition timing of the engine has been inspected and adjusted (if necessary) at least once every three years.</li> <li>In accordance with and 310 CMR 7.00 Appendix C(10)(b), maintain records that document that the ignition timing of each engine was retarded 4° relative to the standard timing (provided the CO emission concentration does not increase beyond 100 ppmvd, corrected to 15% O<sub>2</sub>, the turbocharger speed is not increased beyond the maximum operating speed recommended by the manufacturer, or the exhaust port temperature does not increase beyond the manufacturer's recommended temperature).</li> <li>In accordance with 310 CMR 7.19(13)(a)9., if any engine is operated for 1000 hours or more in any consecutive 12 month period, it shall comply with the recordkeeping requirements specified in 310 CMR 7.19(13)(d).</li> <li>In accordance with Regulation 310 CMR 7.19(13)(d)3., the Permittee shall measure and record for each engine on a daily basis: type fuel(s) burned each day, heat content of each fuel, the total heating value of the fuel consumed for each day, and the allowable emission rate.</li> <li>In accordance with Regulation 310 CMR 7.19(13)(d)7., the Permittee shall maintain copies of all fuel certifications or fuel oil analyses on site for a period of five years.</li> <li>In accordance with Regulation 310 CMR 7.19(13)(d) 8., the Permittee shall maintain all records required by 310 CMR 7.19(13)(d) for a period of five years in a permanently bound log book or any</li> </ol>
1 2 3 4 5 6 24 25 30	other form acceptable to the Department including computer retained and generated data.  26. In accordance with 310 CMR 7.00 Appendix C(10)(b), the Permittee shall record the certification from the fuel supplier for each shipment of #2 fuel oil to be used which shall include the following information:  a. The name of the oil supplier;  b. Percent sulfur content (by weight); and  c. The location where the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility or other location.  As an alternative, the Permittee may elect to analyze the oil immediately after the fuel storage tank is filled and before any oil is combusted for each new shipment according to methods approved by the MassDEP. These records shall be maintained on-site.

Table 5c	
EU	Recordkeeping Requirements
4 5	27. In accordance with 40 CFR 63.6655(a),(d), (e), the Permittee shall maintain comprehensive and accurate records of:
6 24 25	a. a copy of each notification and report that you submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
	b. the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
	c. performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
	d. all required maintenance performed on the air pollution control and monitoring equipment.
	e. actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
	f. the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
	g. the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
24 25	28. In accordance with 40 CFR 63.6655 (f), the Permittee shall maintain comprehensive and accurate records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for periods of demand response operation for an Energy Emergency Alert Level 2, periods of a deviation of voltage or frequency of 5% or greater below standard voltage or frequency, and non-emergency periods as part of a financial arrangement with another entity, the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
30	29.In accordance with 310 CMR 7.04(4)(a), maintain comprehensive and accurate records of the annual inspection, maintenance and testing and the date upon which it was performed. These said records shall be posted conspicuously on or near each unit.
Facility- wide	30. In accordance with 310 CMR 7.00 Appendix C(10)(b), maintain records of all monitoring data and supporting information on site for a period of at least five years from the date of the monitoring sample, measurement, report or initial operating permit application.
	31.In accordance with 310 CMR 7.12, maintain for five years the records required to determine the nature and amounts of emissions from the facility.
	32. In accordance with 310 CMR 7.00 Appendix C(10)(b), maintain records documenting that there are working/non-expired portable ammonia detectors available for use during a spill or an atypical atmospheric release.
	33.In accordance with 310 CMR 7.71 (6) b. and c. retain at the facility for five years and make available to the Department upon request copies of the documentation of the methodology and data used to quantify emissions. (State only requirement)

#### Table 5 Key

EPA = Environmental Protection Agency

EU = Emission Unit

CEM = continuous emission monitor

NOx = nitrogen oxides

RICE = reciprocating internal combustion engine

SCR = selective catalytic reduction

CO = carbon monoxide

	Table 6a <sup>(1)</sup>	
EU	Reporting Requirements	
1 2 3	<ol> <li>In accordance with DEP Approval #1-P-95-011 (6/8/95 &amp; 11/27/95), 310 CMR 7.00 Appendix C(10)(d) and 310 CMR 7.19(13)(d)2., submit a report to the WERO offices quarterly by January 15, April 15, July 15, and October 15th giving the following information for the preceding calendar year quarter:         <ol> <li>The monthly report from the facility CEMs containing summary emission data in a format acceptable to the MassDEP.</li> <li>A report of any excess emissions as measured by a CEM, with explanations, from allowable emission levels or operating conditions which shall include:</li></ol></li></ol>	
	<ol> <li>In accordance with Regulation 310 CMR 7.19(13)(d)9., submit compliance records within 10 days of written request by the MassDEP or EPA.</li> <li>The Permittee shall comply with all applicable reporting requirements contained in 40 CFR Part 60 Subpart GG.</li> <li>In accordance with 310 CMR 7.32, submit reports as required by the Massachusetts Clean Air Interstate Rule (CAIR).</li> </ol>	
	5. In accordance with 40 CFR 75.61, provide notification of QA testing for Relative Accuracy Test Audits (RATAs) and Appendix E/LME (Low Mass Emission) unit tests. Notification must be made at least 21days prior to the scheduled test date to the EPA and to the DEP Regional office, Attn: BWP Permit Chief. If tests must be rescheduled, 24 hours notice must be given, as specified in 40 CFR 75.61(a)(5). A previously approved RATA protocol may be referenced at the time of test notification provided that the referenced protocol was completed in accordance with current 40 CFR Part 75 procedures, addresses all previous DEP protocol comments to the satisfaction of the DEP, and none of the information has changed. If a revised protocol must be submitted, it must be submitted at least 21 days prior to the scheduled test date.	
	6. In accordance with 40 CFR 75.63(a)(2), submit a hardcopy of the QA RATA or 40 CFR Part 75 Appendix E/LME test results to the DEP Regional offices within 45 days of completion of tests. The electronic results must be submitted in the quarterly electronic data report (EDR).	
	7. In accordance with 40 CFR 75.64(a) report NO <sub>X</sub> emissions data directly to EPA's National Computer Center mainframe computer in a method acceptable to EPA. The deadline to submit data to EPA is 30 days after the end of each calendar quarter.	
	8. In accordance with 40 CFR 75.64(a), report results from QA daily Calibrations, quarterly Linearity checks and Appendix D Fuel Flow-meter tests electronically in the EDR submittal for the quarter in which the testing occurs.	

	Table 6b <sup>(1)</sup>	
EU	Reporting Requirements	
1 2	9. In accordance with 310 CMR 7.70(2)(a)5. and Transmittal #X007169, each submission under the CO <sub>2</sub> Budget Trading Program shall be submitted, signed, and certified by the CO <sub>2</sub> authorized account representative. (State only Requirement)	
3	10. In accordance with 310 CMR 7.70(4)(a) and Transmittal #X007169, for each control period in which a CO <sub>2</sub> budget source is subject to the CO <sub>2</sub> requirements of 310 CMR 7.70(1)(e)3., submit to the Department by the March 1 following the relevant control period, a compliance certification report <b>to the MassDEP Boston office</b> . The compliance certification shall contain, at a minimum, the items listed in 310 CMR 7.70(4)(a)2. and 3. (State only Requirement)	
	11. In accordance with 310 CMR 7.70(6)(c) and Transmittal #X007169, following the establishment of a CO <sub>2</sub> Allowance Tracking System account, all submissions to the Department or its agent pertaining to the account, shall be made only by the CO <sub>2</sub> authorized account representative for the account. (State only Requirement)	
	12. In accordance with 310 CMR 7.70(8)(d) and Transmittal #X007169, the CO <sub>2</sub> authorized account representative shall submit written notifications to the Department and the Administrator in accordance with 40 CFR 75.61. (State only Requirement)	
	13. In accordance with 310 CMR 7.70(8)(e)1. and Transmittal #X007169, comply with all recordkeeping and reporting requirements in 310 CMR 7.70(8)(e), the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of 310 CMR 7.70(2)(a)5. (State only Requirement)	
	14. In accordance with 310 CMR 7.70(8)(e)2. and Transmittal #X007169, submit such monitoring plan in the manner prescribed in 40 CFR 75.62. (State only Requirement)	
	15. In accordance with 310 CMR 7.70(8)(e)3. and Transmittal #X007169, submit a certification application to the Department within 45 days after completing all CO <sub>2</sub> monitoring system initial certification or recertification tests required under 310 CMR 7.70(8)(b) including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f). (State only Requirement)	
	16. In accordance with 310 CMR 7.70(8)(e)4.a.i. and Transmittal #X007169, report the CO <sub>2</sub> mass emissions data for the CO <sub>2</sub> budget unit that commenced commercial operation before July 1, 2008, in an electronic format prescribed by the Administrator, unless otherwise prescribed by the Department, for each calendar quarter beginning with the calendar quarter covering January 1, 2009 through March 31, 2009. (State only Requirement)	
	17. In accordance with 310 CMR 7.70(8)(e)4.b. and Transmittal #X007169, submit each quarterly report to the Department's agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR 75.64. Quarterly reports shall include all of the data and information required in Subpart G of 40 CFR Part 75, except for opacity, NO <sub>x</sub> and SO <sub>2</sub> provisions. (State only Requirement)	

	Table 6c <sup>(1)</sup>	
EU	Reporting Requirements	
1 2	18. In accordance with 310 CMR 7.70(8)(e)4.c. and Transmittal #X007169, submit to the Department or its agent a compliance certification in support of each quarterly report. (State only Requirement)	
3	19. In accordance with 310 CMR 7.70(8)(h)6.a. and Transmittal #X007169, comply with all output recordkeeping and reporting requirements in 310 CMR 7.70(8)(h) and with the requirements of 310 CMR 7.70(1)(e)5. and (2)(a)5. (State only Requirement)	
	20. In accordance with 310 CMR 7.70(8)(h)6.c. and Transmittal #X007169, submit annual output reports in a spreadsheet both electronically and in hardcopy by March 1 for the immediately preceding calendar year to the MassDEP Boston office or the Department's agent. (State only Requirement)	
4 5 6	21. In accordance with the DEP NOx RACT Approval #1-E-94-032 (9/15/94), notify the MassDEP if any single engine operation exceeds 1000 hours for any consecutive 12 month period, and the engine becomes subject to an emission standard of 9.0 g/bhp-hr as found in 310 CMR 7.19(8)(c) and the testing, monitoring, record-keeping and reporting requirements specified in 310 CMR 7.19(13).	
	22. In accordance with 310 CMR 7.00 Appendix C(10)(a), notify the MassDEP if the facility is unable to retard timing of the engine as required by 310 CMR 7.19(8)(d).	
	23. In accordance with Regulation 310 CMR 7.19(13)(d)9., submit compliance records within 10 days of written request by the MassDEP or EPA.	
4 5 6 24 25	24. In accordance with 40 CFR 63.6640(e), the Permittee shall report each instance in which you did not meet the requirements in Table 8 of 40 CFR Part 63 Subpart ZZZZ that apply to you.	
24 25	25. In accordance with 40 CFR 63.6603 and 63.6640, Footnote 2 of Table 2d, if an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice as soon as practicable and the Federal, State or local law under which the risk was deemed unacceptable.	

	Table 6d <sup>(1)</sup>	
EU	Reporting Requirements	
24 25	26. In accordance with 40 CFR 63.6650(h), if you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section and as specified below.	
	a. The report must contain the following information:	
	1) Company name and address where the engine is located.	
	2) Date of the report and beginning and ending dates of the reporting period.	
	3) Engine site rating and model year.	
	4) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.	
	5) Hours operated for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).	
	6) Number of hours the engine is contractually obligated to be available for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).	
	7) Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.	
	8) If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.	
,	9) If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.	
	b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.	
	c.The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ( <a href="https://www.epa.gov/cdx">www.epa.gov/cdx</a> ). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.	

Table 6e <sup>(1)</sup>	
EU	Reporting Requirements
Facility- wide	<ul> <li>27. In accordance with 310 CMR 7.00 Appendix C(10)(a), submit to the Department any record relevant to this operating permit or to the emissions of any air contaminant from the facility within 30 days of the request by the Department or EPA.</li> <li>28. In accordance with 310 CMR 7.00 Appendix C(10)(f), the Permittee shall report to the Department's Regional Bureau of Waste Prevention all instances of deviations from permit requirements. (See Provision 25 in "GENERAL CONDITIONS FOR OPERATING PERMIT")</li> </ul>
	29. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), notify the MassDEP immediately by telephone, and within three working days in writing, following the release or the threat of release of ammonia, and/or upsets or malfunctions to the ammonia handling or delivery systems. The facility must comply with all notification procedures required under MGL Chapter 21E-Spill Notification Regulations.
	30. Submit a Source Registration/Emission Statement Form to MassDEP on an annual basis as required by 310 CMR 7.12.
	31. In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by the Department that stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos shall cause such stack testing to be summarized and submitted to the Department as prescribed in the agreed to pretest protocol.
	32. In accordance with 310 CMR 7.00: Appendix C(10)(c), the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year).
	33. Submit Annual Compliance report to MassDEP and EPA by January 30 of each year and as required by General Condition 10 of this Permit.
	34. In accordance with 310 CMR 7.71(5), by April 15 <sup>th</sup> , 2010 and April 15 <sup>th</sup> of each year thereafter report emissions of greenhouse gases from stationary emissions sources including, but not limited to, emissions from factory stacks, manufacturing processes and vents, fugitive emissions, and other process emissions; and owned or leased motor vehicles when stationary source greenhouse gas emissions are greater than 5,000 short tons CO2e. Report greenhouse gas emissions electronically in a format that can be accommodated by the registry. (State only requirement)
	<ul> <li>35. In accordance with 310 CMR 7.71(6), certify greenhouse gas emissions reports using a form provided by the Department or the registry. (State only requirement)</li> <li>36. In accordance with 310 CMR 7.71(7), by December 31<sup>st</sup> of the applicable year submit to the Department documentation of triennial verification of the greenhouse gas emissions report. (State only requirement)</li> </ul>

#### Table 6 Key

CEMs = Continuous Emission Monitoring System

CFR = Code of Federal Regulations

CGA = Cylinder Gas Audit Audit

CO = Carbon Monoxide

CO2 = Carbon Dioxide

CO2e = Carbon Dioxide Equivalent

COMS = Continuous Opacity Monitoring System

EPA = Environmental Protection Agency

EU = Emission Unit

HAP = Hazardous Air Pollutant

NH3 = Ammonia

NO<sub>X</sub> = Oxides of Nitrogen RATA = Relative Accuracy Test

SCR = Selective Catalytic Reduction

#### Table 6 Notes:

(1) The annual Source Registration/Emission Statement report shall be submitted to the MassDEP office specified in the instructions. *All other MassDEP reports are to be submitted to the Western Regional Office address unless* 

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a reporting condition specifically directs the report to a different location.



### <u>C.</u> <u>GENERAL APPLICABLE REQUIREMENTS</u>

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

#### D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

	Table 7
Regulation	Reason
310 CMR 7.27	Superseded by 310 CMR 7.28 and 7.32
310 CMR 7.28	As of January 1, 2009, this regulation is no longer applicable; it was superseded by 310 CMR 7.32.
310 CMR 7.16	Employs fewer than 250 people
Reduction of Single Occupant Commuter	
Vehicle Use	
40 CFR Part 64 –Compliance Assurance	Not applicable
Monitoring	

### 5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

	Table 8a	
EU	Special Terms and Conditions	
1 2	1. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall not burn more than 1.71 x 10 <sup>12</sup> Btu [HHV] from oil use for each 365 consecutive day period.	
3	2. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and 310 CMR 7.00 Appendix C(7)(a), the Permittee shall operate each combustion turbine during startup or shutdown for no more than 3 hours duration. The turbine shall be brought into compliance with emission limits as quickly as possible while operating within the manufacturer's recommended startup and shutdown procedures.	
	3. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95) and 310 CMR 7.00 Appendix C(7)(a), the Permittee shall operate each combustion turbine at or above 25 MW, except during periods of startup or shutdown.	
	4. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the SCR control equipment for each combustion turbines shall be operational whenever each turbine is operating at 50 percent or greater.	
	5. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall ensure that the minimum SCR catalyst operating temperature at the inlet to the control system catalyst unit is at or above 480°F (one-hour block average) during sustained operation.	
	6. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall use in conjunction with the SCR control system an aqueous ammonia solution containing (nominally) up to 29.4% ammonia. [State only]	
	7. The owner/operator of Pittsfield Generating Company LP is subject to and shall comply with the Massachusetts Clean Air Interstate Rule (CAIR), 310 CMR 7.32, and has submitted a CAIR emission control application pursuant to 310 CMR 7.32(3).	
5	8. EU 4, 5, 6, 24 and 25 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63.6580 through 63.6675 and shall comply with all applicable standards.	
6 24	9. EU 4, 5, 6, 24 and 25 are subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table 8 to Subpart ZZZZ of 40 CFR 63]. Compliance with all applicable provisions	
25	therein is required.	

Table 8b	
EU	Special Terms and Conditions
4	10. In accordance with 40 CFR 63.6603(a), Table 2d, the Permittee shall:
5	<ul><li>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;</li><li>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as</li></ul>
6	necessary; and
25	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
	Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i)or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR Part 63 Subpart ZZZZ.
24	11. In accordance with 40 CFR 63.6603(a), Table 2d, the Permittee shall:  a. Change oil and filter every 500 hours of operation or annually, whichever comes first;  b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and  c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
	Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i)or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR Part 63 Subpart ZZZZ.
4	12. In accordance with 40 CFR 63.6605(a) and (b),
5	a. The Permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
6	b. At all times the Permittee must operate and maintain any affected source, including associated air
24	pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not
25	require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be
	based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records,
	and inspection of the source.
	13. In accordance with 40 CFR 63.6640(a), Table 6, the Permittee shall continuously comply with the work or management practices as required by the following:
	a. Operate and maintain EU 4, 5, 6, 24 and 25 according to the manufacturer's emission-related operation and maintenance instructions; or
	b. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Table 8c		
EU	Special Terms and Conditions	
24 25	14. In accordance with 40 CFR 63.6640(f)(1), (2) and (4), the Permittee shall operate the engine according to the conditions described in 40 CFR 63.6640(f)(1), (2) and (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing and emergency demand response, as described in 40 CFR 63.6640(f)(1),(2) and (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1), (2) and (4), the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.	
	a. There is no time limit on the use of emergency stationary RICE in emergency situations.	
	b. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs 1) through 3) specified below for a maximum of 100 hours per calendar year.	
	1) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.	
	2) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.	
	<ol> <li>Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.</li> </ol>	
	c. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of 40 CFR 63.6640. Except as provided in paragraphs (f)(4)(i) and (ii) of 40 CFR 63.6640, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.	
Facility -wide	15. The Permittee is subject to, and has stated in the initial Operating Permit application, TR#108045, that the Permittee is in compliance with the requirements of 40 CFR 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and the United States Environmental Protection Agency enforces these requirements.	
	16. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall ensure that the emissions of any criteria pollutant from the plant will not exceed 249 tons per year.	

Table 8d		
EU	Special Terms and Conditions	
Facility -wide	17. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall properly train all personnel to operate the facility and control equipment in accordance with vendor specifications. All persons responsible for the operation of the ammonia handling and SCR control systems shall sign a statement affirming that they have read and understand the approved standard operating and standard maintenance procedures. This training shall be updated at least once annually. [State only]  18. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall maintain in the control room portable ammonia detectors for use during a spill or an atypical atmospheric release. [State only]	
	19. In accordance with DEP Approval #1-P-95-011 (6/8/95 & 11/27/95), the Permittee shall keep, at all times, enough plastic balls within the containment area around the ammonium hydroxide storage tank to provide 90% surface coverage of any spilled ammonium hydroxide. The balls must be free of ice and other restrictions that would inhit their floatation. [State only]	

**Table 8 Key** EU = Emission Unit

EPA = Environmental Protection Agency

HAP = Hazardous Air Pollutant

RICE = Reciprocating Internal Combustion Engine SCR = Selective Catalytic Reduction

#### **6.** ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit application.

### **7.** EMISSIONS TRADING

#### A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

#### B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

#### **8.** COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

#### GENERAL CONDITIONS FOR OPERATING PERMIT

#### **9.** FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

#### **10.** COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm#op">http://www.mass.gov/dep/air/approvals/aqforms.htm#op</a>.

#### A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Air Compliance Clerk, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- 4) any additional information required by the MassDEP to determine the compliance status of the source.

#### B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- 1) the terms and conditions of the Permit that are the basis of the certification;
- 2) the current compliance status during the reporting period;
- 3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- 4) whether there were any deviations during the reporting period;
- 5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- 6) whether deviations in the reporting period were previously reported;
- 7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- 8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- 9) any additional information required by the MassDEP to determine the compliance status of the source.

#### 11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

#### **12.** PERMIT SHIELD

A. This facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval

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or Permit, the terms and conditions of this Permit control.

- B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4. Table 7.
- C. Nothing in this Permit shall alter or affect the following:
  - 1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.
  - 2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
  - 3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

#### **13.** ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

#### **14.** PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

### **15.** PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in

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accordance with 310 CMR 7.00: Appendix C(13).

#### **16.** REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

#### 17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

#### 18. <u>DUTY TO SUPPLEMENT</u>

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

### 19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

#### **20.** PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

#### **21.** INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
- B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

#### **22.** PERMIT AVAILABILITY

The Permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

#### 23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

### 24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based<sup>1</sup> emission limitations specified in this Permit as a result of an emergency<sup>2</sup>. In order to use emergency as an

<sup>&</sup>lt;sup>1</sup> Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

<sup>&</sup>lt;sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

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 $affirmative\ defense\ to\ an\ action\ brought\ for\ noncompliance,\ the\ Permittee\ shall\ demonstrate\ the\ affirmative$ 

defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. the permitted facility was at the time being properly operated;
- C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and
- D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

#### **25.** PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone, fax or electronic mail (e-mail), within three (3) days of discovery of such deviation:

- A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the Permit or approval as surrogate for an emission limit.
- C. Exceedances of Permit operational limitations directly correlated to excess emissions.
- D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting

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Kit, which is available to the Permittee via the MassDEP's web site, <a href="http://www.mass.gov/dep/air/approvals/aqforms.htm#op">http://www.mass.gov/dep/air/approvals/aqforms.htm#op</a>.

This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

#### **26.** OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

#### **27.** MODIFICATIONS

- A. Administrative Amendments The Permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).
- B. Minor Modifications The Permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2.,provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).
- C. Significant Modifications The Permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).
- D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

#### **28.** OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this facility, and the United

States Environmental Protection Agency enforces these requirements.

- A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - 1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
  - 2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
  - 3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
  - 4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
- B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
  - 1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
  - 2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
  - 3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - 4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
  - 5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.
  - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part82, Subpart A, "Production and Consumption Controls".
- D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight

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sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

#### **29.** PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

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#### APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.